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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,626	01/07/2004	Rajendra K. Shah	60,246-300; 10,831	5974

26096 7590 12/13/2005

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EXAMINER

TANNER, HARRY B

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/752,626	Applicant(s) SHAH ET AL.	
	Examiner Harry B. Tanner	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5, 8, 9 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. Kobayashi discloses a thermostat 14, indoor controller 101, 104 and outdoor controller 17 connected by a serial data bus 106 in which the indoor controller is directly wired to a damper control 9A to provide a heating function to air within an environment.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 10-11, 16-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. Kobayashi discloses the invention substantially as claimed. Kobayashi discloses two wires for providing power to the indoor and outdoor controllers and two wires for providing data between the indoor controller, outdoor controller and thermostat (see col. 5, line 63 to col. 6, line 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Kobayashi such that four wires were used to connect all the controllers of the system rather than just some of the controllers since the concept of using four wires interconnecting some of the controllers is clearly shown on Figure 6.

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The provision of the four wires as distinct and separate wires is considered to have been an obvious matter of engineering design based upon the particular installation since the operation of the data bus will not be substantially changed.

Claims 3 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al as applied to claim 4 above, and further in view of Otsuka et al. Otsuka teaches the provision of peripheral HVAC units such as humidifier in combination with a heat source device (see col. 9, lines 41-45) . It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Kobayashi such that it included the provision of peripheral HVAC units such as humidifier in combination with a heat source device in view of the teachings of Otsuka.

Claims 23-24 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al as applied to claim 1 above, and further in view of official notice. Official notice is taken that HVAC systems that have a furnace and fan/heater unit or an air conditioner and heat pump were conventional at the time the invention was made. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Kobayashi such that the HVAC system was a furnace and fan/heater unit or an air conditioner and heat pump.

Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al as applied to claim 10 above, and further in view of official notice as applied to claim 23 above.

Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi as applied to claim 4 above, and further in view of Munson et al. Munson teaches the provision of an interface adapter for interfacing a remote controller to an environmental control system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Kobayashi such that it included the use of an interface adapter for interfacing a remote controller to the control system in view of the teachings of Munson.

Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi as applied to claim 4 above, and further in view of Jurewicz et al. Jurewicz teaches the use of a serial communication bus to connect remoter sensors to a control system (see col. 3, lines 23-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Kobayashi such that it included the use of the serial communication bus to connect remoter sensors to a control system in view of the teachings of Jurewicz.

Applicant's arguments filed on 8/4/05 have been fully considered but they are not persuasive. For example, with respect to applicant's contention that Kobayashi et al does not meet the limitations of claim 1 because Kobayashi is directed to a very large building whereas the claimed invention is directed to a residential-type HVAC system, it is noted that there is no reference in claim 1 as to the size or type of HVAC. With respect to applicant's contention that the thermostat of Kobayashi does not have a "central control", it is noted that applicant does not show nor describe what the "central control" is other than that it is in the thermostat and the thermostat can receive user-

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desired settings and communicate several distinct control signals to an indoor unit over two wires. These are same operations that occur in thermostat 14 of Kobayashi which inherently has a "central control" that convert user setting input into control signals that are transmitted to the indoor control over the two wire data bus 106.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry B. Tanner whose telephone number is (571) 272-4813. The examiner can normally be reached 8:30 am to 5:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melba Bumgarner, can be reached on (571) 272-4709. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Harry B. Tanner". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Harry B. Tanner
Primary Examiner
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